CLAIMS

1. A process for isolating F(ab) fragments from an antibody containing source comprising: contacting the antibody containing source with a papain-polyacrylamide matrix to obtain a solution containing F(ab) and F(c) fragments; and passing the solution containing the F(ab) and F(c) fragments through an affinity chromatography system having a gel comprised of an antigen (having an affinity for the F(ab) fragments) embedded in a polyacrylamide matrix, whereby the F(ab) fragments are isolated from the F(c) fragments for subsequent recovery.

2. The process of claim 1 wherein the antibody containing source is a bulk, unprocessed hyperimmune serum.

3. The process of claim 1 wherein the antibody containing source is a monoclonal antibody source.

4. The process of claim 1 wherein the antibody containing source is partially purified by precipitation procedures.

5. A process for isolating F(ab) fragments from an antibody containing source comprising: contacting the antibody containing source with a papain-polyacrylamide matrix to obtain a solution containing F(ab) and F(c) fragments; and passing the solution containing the F(ab) and F(c) fragments through an affinity chromatography system having a gel comprised of an antigen (having an affinity for the F(c) fragments) embedded in a polyacrylamide matrix, whereby the F(ab) fragments are isolated from the F(c) fragments for subsequent recovery.

6. The process of claim 5 wherein the antibody containing source is a bulk, unprocessed hyperimmune serum.

7. The process of claim 5 wherein the antibody

containing source is a monoclonal antibody source.

8. The process of claim 5 wherein the antibody containing source is partially purified by precipitation procedures.

9. A process for isolating $F(ab)_2$ fragments from an antibody containing source comprising: contacting the antibody containing source with a pepsin-polyacrylamide matrix to obtain a solution containing $F(ab)_2$ and F(c) fragments; and passing the solution containing the $F(ab)_2$ and F(c) fragments through an affinity chromatography system having a gel comprised of an antigen (having an affinity for the $F(ab)_2$ fragments) embedded in a polyacrylamide matrix, whereby the $F(ab)_2$ fragments are isolated from the F(c) fragments for subsequent recovery.

10. The process of claim 9 wherein the antibody containing source is a bulk, unprocessed hyperimmune serum.

11. The process of claim 9 wherein the antibody containing source is a monoclonal antibody source.

12. The process of claim 9 wherein the antibody containing source is partially purified by precipitation procedures.

13. A process for isolating $F(ab)_2$ fragments from a bulk antibody containing source comprising: contacting the antibody containing source with a pepsin-polyacrylamide matrix to obtain a solution containing $F(ab)_2$ and F(c) fragments; and passing the solution containing the $F(ab)_2$ and F(c) fragments through an affinity chromatography system having a gel comprised of an antigen (having an affinity for the F(c) fragments) embedded in a polyacrylamide matrix, whereby the $F(ab)_2$ fragments are isolated from the f(c) fragments for subsequent recovery.

14. The process of claim 13 wherein the antibody containing source is a bulk, unprocessed hyperimmune serum.

15. The process of claim 13 wherein the antibody containing source is a monoclonal antibody source.

16. The process of claim 13 wherein the antibody containing source is partially purified by precipitation procedures.

17. A process for isolating IgG antibodies from a bulk, antibody containing source comprising: passing the bulk, antibody containing source through an affinity chromatography system having a gel comprised of an antigen having an affinity for the IgG antibody embedded in a polyacrylamide matrix, whereby the IgG antibody is isolated from the bulk, antibody containing source for subsequent recovery.

18. The process of claim 17 wherein the bulk, antibody containing source is bulk, unprocessed hyperimmune equine serum.

19. The process of claim 17 wherein the bulk, antibody containing source is a monoclonal antibody source.

20. An F(ab) fragment extracted from an antibody containing source according to the process of claim 1.

21. An $F(ab)_2$ fragment extracted from an antibody containing source according to the process of claim 9.

22. An IgG molecule extracted from bulk antibody containing source according to the process of claim 17.

23. An F(ab) fragment extracted from a polyvalent IgG(T) source according to the process of Claim 1.

24. An F(ab) fragment extracted from a polyvalent anti-horse serum according to the process of Claim 1.

25. An $F(ab)_2$ fragment extracted from a polyvalent IgG(T) source according to the process of Claim 9.

26. An $F(ab)_2$ fragment extracted from a polyvalent anti-horse serum according to the process of Claim 9.

27. An antivenin composition comprising an administrable form of F(ab) fragments which are active against venoms of species of the Crotalus genus, and which produce an electrophoresis showing that anti-$F(ab)_2$ materials give a precipitation band against the F(ab) fragments but produce no precipitation band against anti-F(c) materials and wherein said F(ab) fragments have a molecular weight of about 50,000.

28. An antivenin composition comprising an administrable form of $F(ab)_2$ fragments which are active against venoms of species of the Crotalus genus, and wherein said $F(ab)_2$ fragments have a molecular weight of about 100,000.

29. An antivenin composition comprising an administrable form of polyvalent F(ab) fragments which produce an electrophoresis showing that anti-$F(ab)_2$ materials give a precipitation band against F(ab) fragments but produce no precipitation band against anti-F(c) materials and wherein said F(ab) fragments have a molecular weight of about 50,000.

30. An antivenin composition comprising an administrable form of IgG molecules derived from a bulk antibody containing sogree which ~~are active against~~ binds specifically to venoms of species of the Crotalus genus and wherein the said IgG molecules have a molecular weight of about 150,000.